

Response:

1. **The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims... or the features canceled from the claims.** The applicant respectfully responds that the original drawings are correct, but the claims were faulty. The applicant has amended the claims to conform with the words and figures in the disclosure, as stated by the examiner.
2. **The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. The disclosure fails to disclose the original limitation of claim 1 “a one-piece retrofit hurricane and earthquake connector” and “double angled offset member”.** There are no references in the disclosure for the invention being “one-piece”, but the figures, especially the flat pattern layout, shows that the invention is made from one-piece. The applicant respectfully requests that the examiner delete “one-piece” from claim 1. There are numerous references in the specification that the invention can be retrofit onto existing construction. The title of the application is the only reference to a “retrofit hurricane-earthquake clip”. There are numerous references to the fact that this invention can prevent hurricane and earthquake damage to a building. The applicant respectfully requests that the examiner amend claim 1. Please change “a one- piece retrofit hurricane and earthquake connector” to “A unitary retrofit connector that helps prevent hurricane and earthquake damage to a building by positively connecting a roof to a wall on a house comprising:”
3. The “double angled offset member” is actually the applicant’s offset web 13, shown on figure 1, and the two angles, 9 and 12, that are attached to the offset web. The applicant respectfully requests that the examiner amend claim 1. Please change “connected by a double angled offset member” to “c. said base web and said top web connected by an offset web; d. said offset web having angled bends on opposite ends.”
4. **Claims 1, 3, 4, 8, and 11-14 are objected to because of the following informalities: as to claim 1, the limitation “the roof” and “the wall” in line 2 should read “a roof” and “a wall” respectively.** The applicant agrees and has amended the claim.

5. **As to claims 3 and 4, the limitation “short and wide offset member” should read “short-and-wide, offset member”. The applicant has amended claims 3 and 4 by changing “short and wide offset member” to “offset web” as described in applicant’s paragraph 3 above.**
6. **As to claim 8, the limitation “as a means of attachment to the” in line 4 should be “for attaching to”. The applicant agrees and has amended the claim.**
7. **As to claim 11, the limitation “the roof” and “the wall” in line 2 should be “a roof” and “a wall” respectively. The applicant agrees and has amended the claim.**
8. **As to claim 12, the limitation “a” should be inserted after “having” in line 1 and before “shape” in line 2, the limitation “as a means” in line 2 should be deleted, and the limitation “the” in line 3 should be “an”. The applicant agrees and has amended claim 12.**
9. **As to claim 13, the limitation “the” in line 2 should be “a” and the limitation “as a means” in line 3 should be deleted. The applicant agrees and has amended the claim.**
10. **As to claim 14, the limitation “as a means” in line 3 and in line 5 should be deleted. The applicant agrees and has amended the claims.**
11. **Claims 1-14 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Regarding claims 1 and 11, the limitation “a permanent one-piece retrofit hurricane and earthquake connector” in line 1 does not appear in the disclosure. As stated in applicant’s paragraph 2 above, the applicant has amended claims 1 and 11 by changing “a one-piece retrofit hurricane and earthquake connector” to “A unitary retrofit connector that helps prevent hurricane and earthquake damage to a building by positively connecting a roof to a wall on a house comprising:”**

12. **Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the intervention. Claims 1-14 are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. Regarding claim 1, the limitation “comprising a base member” is unclear whether the house or the connector comprises the base member. The limitation “connected by a double angled offset member” is line 4 is unclear whether the double angle offset member connects the roof and the wall, or the rafter tabs.**
The applicant has amended claim 1 to clear the 112 objection as follows:

1. A unitary, retrofit connector that helps prevent hurricane and earthquake damage to a building by positively connecting a roof to a wall, comprising:
 - a. a base member;
 - b. an offset, angled, top web having generally right angled bends forming rafter webs;
 - c. said base web and said top web connected by an offset web;
 - d. said offset web having acute angled bends attached to said base web and said top web.

13. **Regarding claim 2, the limitation “the outside wall” in line 4 is unclear whether the wall is a different wall than the wall recited in line 2 of claim 2. Furthermore, the limitation “an existing house” is unclear whether the existing house is different than the house recited in line 3 of claim 1. The applicant respectfully requests that the examiner amend claim 2. Please change “as a means for easy attachment to the outside wall of an existing house” to “as a means for retrofitting to the exterior of said wall, and into an underlying structural member”. This clears up the house and wall ambiguity.**

14. **Claims 3 and 4 recite the limitation “said short and wide offset member” in line 1. There is insufficient antecedent basis for this limitation in the claim. The applicant agrees. Please change “short and wide offset member” to “offset web”. This clears the 112 rejection.**

15. **Regarding claim 5, the limitations “said acute angled bends” in line 1 and “the top and bottom” in line 2 lacks antecedent basis. Furthermore, the limitation “the top and bottom” in line 2 is unclear. The limitation “a completed house” in line 5 is unclear whether the completed house is the same as the house recited in line 3 of claim 1. Furthermore, the word “means” in line 3 is preceded by the word(s) “of offsetting said top web” in an attempt to use a “means” clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding “means”, it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex Parte Klumb, 159 USPQ 694 (Bd.App. 1967)*. On line 1, the acute angled bends are defined in claims 3 and 4. Please change “said acute angled bends” to “said first and second acute angled bends”. On line 2, please change “attached to the top and bottom of said offset member” to “attached to opposite ends of said offset web”. On the last line, please change “blocking that stick out on a completed house.” to “blocking that stick out from the wall.” On lines 3 and 4, please change “opposite directions as a means of offsetting said top web adjacent to frieze” to “opposite directions as an offsetting means of placing said top web away from frieze”. This clears the 112 rejection.**

16. **Regarding claim 6, the limitation “the rafter, outside wall, and underlying to plate” in line 4 lack antecedent basis. Furthermore, the limitation “a house” in line 5 is unclear whether the house is a different house other than the house recited in line 3 of claim 1. On line 2, please change “offset web forming said base member and said top web” to “offset web forming said base web and said top web”. On line 4, please change “between the rafter, outside wall, and underlying top plate” to “between a rafter of said roof, said wall, and underlying structural members”. On lines 5 and 6, please change “preventing said outside wall from detaching from a house.” to “preventing said exterior wall from detaching from said roof rafter.” This clears the 112 rejection.**

17. **Regarding claim 7, it is unclear whether applicant is claiming the connector formed (Fig. 1) or unformed (Fig. 4 or Fig. 5). On lines 1-4, please change “having a generally vertical cut line in the approximate center and at generally right angles near said second**

acute angle bend, and divides said top web" to " having generally vertical right angle bends generally near said second acute angle bend , dividing said top web". Claim 7 now claims figure 1.

18. **Regarding claim 8, the limitation "said cut lines" in line 1 lack antecedent basis in the claims. The limitation "having a plurality of nail holes" in line 3 is unclear what feature of the invention has the nail holes.** On lines 1-3, please change "wherein said cut lines forming rafter tabs that are generally vertical and bent at generally right angles and having a plurality" to "wherein said right angle bends forming rafter tabs that are generally vertical, parallel, and having a plurality".
19. **Regarding claim 9, the limitation "said blocking webs" in line 1 lacks antecedent basis in the claims. Regarding claims 9 and 10, applicant is urged to review these claims since they contain numerous ambiguities.** Please change claim 9 to "The connector of claim8 wherein said blocking webs having an offset and acute angle, thereby placing said blocking webs generally parallel to frieze boards and blocking on a house, and said blocking having a plurality of nailholes as an attaching means onto said frieze boards and blocking."
20. **Regarding claim 10.** Please change claim 10 to "The connector of claim 1 wherein said base plate, said rafter tabs, and said blocking webs having attaching means to an existing house by a plurality of nail holes, as a means for securing together said outside wall, said underlying structural members, said roof rafter, and said frieze boards and blocking, thereby preventing wind and seismic damage from a hurricane and earthquake."
21. **Regarding claim 11, the limitation "comprising a base member" is unclear whether the house or the connector comprises the base member. The limitation "connected by a double angled offset member" in line 4 is unclear whether the double angled offset member connects the roof and the wall together, or the rafter tabs together or the roof and the wall are connected. Furthermore, the limitation "a roof" in line 5 is the same roof as that recited in line 2 of claim 11. The limitation "above a roof" is**

unclear whether applicant is claiming the roof in combination with the connector. Moreover, the limitation "a roof" in line 7 is unclear whether the roof is the same or different than the roof in line 2 or the roof in line 5. The applicant has amended claim 11 to be like claim 1. The applicant respectfully requests that the examiner change claim 11 to the following:

11. A retrofit apparatus that helps prevent hurricane and earthquake damage to a building by positively connecting the top of a roof to a wall, comprising:

- a. a base member;
- b. an offset, angled top web having right angled bends, called rafter upright bends, forming rafter webs;
- c. said base web and said top web connected by an offset web;
- d. said offset web having acute angled bends attached to said base web and said top web;
- e. said rafter tabs having right angle bends, called sheathing bends, perpendicular to said rafter upright bends, forming strengthening tabs;
- f. said rafter tabs dividing said top web into blocking webs;
- g. said blocking webs having right angle bends, called sheathing bends, perpendicular to said rafter upright bends, forming sheathing tabs;
- h. said sheathing tab folded on top of said strengthening tab;
- i. said sheathing tabs and said strengthening tabs having a bolt hole;
- j. a generally rectangular roof plate having a plurality of bolt holes;
- k. nuts and bolts.

22. **Regarding claim 12, the limitation "a roof" in line 3 is unclear whether the roof is another roof different from the roof cited in claim 11 in lines 2, 6, or 7. Please change claim 12 to the following:**

12. The apparatus of claim 11 wherein said roof plate having a predetermined area and a flat shape for conforming to an outside surface of said roof.

23. **Regarding claim 13, the limitation "the placement" in line 5 lacks antecedent basis. Furthermore, it is unclear whether the applicant is positively claiming the roof**

rafter in line 3. Please change claim 13 to the following:

13. The apparatus of claim 11 wherein said roof plate having a plurality of bolt holes spaced greater than a width of a roof rafter for straddling said roof rafter underlying said roof, and having said bolt holes for placing said bolts into said holes on said sheathing tabs and strengthening tabs.
24. **Regarding claim 14, the limitation “a roof” in line 2 is unclear whether the roof is different than the roof recited in line 2, line 6, or line 7 of claim 11. The limitation “a house” in line 2 is unclear whether the house is different than the house in line 2 of claim 11. The limitation “said bolt” in line 4, and “said nut” in line 5 lack antecedent basis in the claims. Furthermore, the limitation “a house” in line 6 is similar as the house in line 3 of claim 14 or the house in line 3 of claim 11. Moreover, it is unclear whether the applicant is claiming the house in line 3. The limitation “having prior attachment to structural members” in line 2 is unclear. What exactly are prior attachment to structural members? Please amend claim 14 as follows:**
 14. The apparatus of claim 11 wherein said apparatus having attaching means below said roof and said roof plate having attaching means above said roof to said apparatus below said roof, using said nuts and bolts, for securing said roof to said wall, thereby avoiding hurricane and earthquake damage.
25. **Claim rejections -35 USC § 102. Claims 1 and 3-7 as best understood, are rejected as being anticipated by Thompson, 6,094,880. Regarding claim 1, Thompson discloses in Figure 10 a one-piece hurricane and earthquake connector comprising a base member 20A and an angled top web 10 with rafter tabs 17, 21. The base member 20A and the angled top web 10 are connected by a double angled offset member 19. Thompson’s 880 is an excellent invention, but it is not a retrofit. It is for new construction. The applicant’s amended claim 1 states “said base web and said top web connected by an offset web” and “said offset web having acute angled bends attached to said base web and said top web”. Thompson’s connector does not have acute angle bends, just right angle bends. Therefore the applicant’s amended claim 1 meets the 102 rejection.**

26. **Regarding claim 3, the offset member 19 has an attachment A5 to the angled top web 10.** The applicant's amended claim 3 states that the base web is attached to the offset web by a first generally horizontal bend at an acute angle. Thompson's 880 shows a jog between his offset web and base web. There is no bend. Therefore the applicant's amended claim 3 meets the 102 rejection.

27. **Regarding claim 4, the offset member 19 has an attachment A6 to the angled top web 10.** The applicant's amended claim 4 states that the top web is attached to the offset web by a second generally horizontal bend at an acute angle. Thompson's 880 shows a right angle bend between his offset web and top web, not an acute angle. Therefore the applicant's amended claim 4 meets the 102 rejection.

28. **Regarding claims 5-6, these claims are impossible to examine.** The applicant has amended claims 5-6 to make them read upon the invention, especially the acute angles, which are not on the cited references.

29. **Regarding claim 7, the angled top web 10 has a generally vertical cut line A17.** The applicant has amend claim 17 to delete the "cut line reference", but keep the acute angle which is not on the cited references.

30. **Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Holizlander 5,606,837 .** Regarding claim 1, Holizlander discloses in Figure 10 a one-piece retrofit hurricane and earthquake connector comprising a base member 70 and an angled top web A2 with rafter tabs 130, 132. The base member 70 and the angled top web A2 is connected by a double angled offset member. Holizlander's brace is a fine invention, but it has no acute angles between its base member and angled top web, as stated in applicant's amended claim 1d.

31. **Regarding claim 2, the base member 70 has a generally flat, generally long-horizontal rectangular shape and nail holes 124.** Holizlander's base member is shown in cross-section on his figure 3. It is actually U-shaped 50, 52, and 54, with flat tops 40

and 42. Therefore, it is not flat as stated in applicant's amended claim 2.

32. **The enclosed amended claims read over the cited references.** A clean copy of the amended claims are enclosed for the examiner's convenience. Accordingly, the applicant submits that this application is now in full condition for allowance, which action applicant respectfully solicits. If the examiner agrees but does not feel that the present claims are technically adequate, applicant respectfully requests that the examiner write acceptable claims pursuant to MPEP 707.07(j).

33. **Certificate of mailing:**

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Printed name of person signing this certificate:

Thomas C. Thompson
Signature: Thomas C. Thompson

Very Respectively,

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Claims (Clean copy)

I claim:

Sub a) 1. A unitary, retrofit connector that helps prevent hurricane and earthquake damage to a building by positively connecting a roof to a wall, comprising:

- a. a base member;
- b. an offset, angled, top web having generally right angled bends forming rafter webs;
- c. said base web and said top web connected by an offset web;
- d. said offset web having acute angled bends attached to said base web and said top web.

2. The connector of claim 1 wherein said base web having a generally flat, generally long-horizontal rectangular shape, with a plurality of nail holes as a means for retrofitting to said exterior wall, and into an underlying structural member.

3. The connector of claim 1 wherein said offset web having attachment to said base web by a first generally horizontal bend at an acute angle.

4. The connector of claim 1 wherein said offset web having attachment to said top web by a second generally horizontal bend at an acute angle.

5. The connector of claim 1 wherein said first and second acute angled bends, attached to opposite ends of said offset web, having generally unequal bends in opposite directions as an offsetting means of placing said top web away from frieze boards and blocking that stick out from said wall on a house.

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6. The connector of claim 5 wherein said unequal bends and offset web forming said base web and said top web unparallel to each other as a means of forming a buttress between a rafter of said roof, said wall, and underlying structural members, thereby preventing said exterior wall from detaching from said roof rafter.
7. The connector of claim 1 wherein said top web having generally vertical right angle bends generally near said second acute angle bend, dividing said top web into left and right blocking webs.
8. The connector of claim 1 wherein said right angle bends forming rafter tabs that are generally vertical, parallel, and having a plurality of nail holes for attaching to the sides of said roof rafter.
9. The connector of claim 8 wherein said blocking webs having an offset and acute angle, thereby placing said blocking webs generally parallel to frieze boards and blocking on said house and said blocking webs having a plurality of nail holes as an attaching means onto said frieze boards and blocking.
10. The connector of claim 1 wherein said base plate, said rafter tabs, and said blocking webs having attaching means to an existing house by a plurality of nail holes, as a means for securing together said exterior wall, said underlying structural member, said roof rafter, and said frieze boards and blocking thereby preventing wind and seismic damage from a hurricane and earthquake.
11. A retrofit apparatus that helps prevent hurricane and

earthquake damage to a building by positively connecting the top of a roof to a wall, comprising:

- a. a base member;
- b. an offset, angled top web having right angled bends, called rafter upright bends, forming rafter webs;
- c. said base web and said top web connected by an offset web;
- d. said offset web having acute angled bends attached to said base web and said top web;
- e. said rafter tabs having right angle bends, called sheathing bends, perpendicular to said rafter upright bends, forming strengthening tabs;
- f. said rafter tabs dividing said top web into blocking webs;
- g. said blocking webs having right angle bends, called sheathing bends, perpendicular to said rafter upright bends, forming sheathing tabs;
- h. said sheathing tab folded on top of said strengthening tab;
- i. said sheathing tabs and said strengthening tabs having a bolt hole;
- j. a generally rectangular roof plate having a plurality of bolt holes;
- k. nuts and bolts.

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(cont)

- 12. The apparatus of claim 11 wherein said roof plate having a predetermined area and a generally flat shape for conforming to an outside surface of said roof.
- 13. The apparatus of claim 11 wherein said roof plate having a plurality of bolt holes spaced greater than a width of a roof rafter for straddling a roof rafter underlying said roof, and having bolt holes for placing said bolts into said holes on either side of said rafter.
- 14. The apparatus of claim 11 wherein said apparatus having

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attaching means below said roof and said roof plate having
attaching means above said roof and to said apparatus below
said roof, using nuts and bolts for securing said roof to
said wall.